REMARKS/ARGUMENTS

Claims 1-17 are canceled as a result of Applicants' election of invention species. Claims 18, 20, 21, and 23 are amended by this response. No claims have been added. Accordingly, claims 18-23 remain pending in the instant application.

Claim Objections of Claims 20, 22, 23

Claim 20 was objected to under 37 CFR 1.75(a) for reciting "said classifier." The Examiner's suggested correction is noted with appreciation. Accordingly, claim 20 has been amended to read "said second defect classifier".

Claim 22 was objected to, because "said second defect classifier" lacked antecedent basis. This objection is resolved by providing proper antecedent basis in amended base claim 20.

Claim 23 was objected to under 37 CFR 1.75 for mistaken dependency. Claim 23 has been amended to depend from claim 22, instead of claim 19.

35 U.S.C. §102 Rejections of Claims 18-23

Claims 18-23 were rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,092,059 to Straforini et al. (hereinafter " Straforini"). These claim rejections are respectfully traversed for the reasons stated below.

Independent claim 18 as amended recites in part:

> A method of classifying defects, comprising the steps of:
> determining a sampling rate of defects to be reviewed by a second inspection machine among defects detected by a first inspection machine; and
> reviewing, with said second inspection machine, defects sampled from said defects detected by said first inspection machine in accordance with said determined sampling rate, and classifying said reviewed defects with a second defect classifier corresponding to said second inspection machine; (emphasis added)

See also independent claim 21.

Here, Straforini fails to teach, either explicitly or impliedly, the steps of "determining a sampling rate of defects to be reviewed by a second inspection machine among defects detected by the a first inspection machine; and reviewing, by said second inspection machine, defects sampled from said defects detected by said first inspection machine in accordance with said determined sampling rate, and classifying said reviewed defects with a second defect classifier corresponding to said second inspection machine."

Straforini discloses a classification system composed of rule-based and training-based classifier modules arranged in a decision tree structure where a subsequent classifier module accepts objects from a preceding classifier module for processing. The subsequent classifier module processes these objects by classifying the unclassified objects and refining the classification of already classified objects. (Straforini: col 4, lines 6-29.) For example, Fig. 3 displays a classification system configured with 3 rule-based classifier modules and 1 training-based classifier module. In Fig. 3, the second rule-based classifier module (RBC2, element 58) accepts classified objects from the training-based classifier module (TBC, element 56) for refining of the classification.

Straforini's RBC2 58 does not perform "determining a sampling rate of defects to be reviewed a second inspection machine." As best understood, Straforini teaches that all classified objects from the TBC 56 are sent to RBC2 for processing. (Straforini: col 15, lines 56-58.) There is no disclosure in Straforini of determining a sampling rate that his RBC2 uses for review. Therefore, Straforini does not teach (or even suggest) "determining a sampling rate of defects to be reviewed by a second inspection machine among defects detected by a first inspection machine."

In fact, Straforini's RBC2 58 does not perform "reviewing of defects sampled." As best understood, Straforini teaches that RBC2 simply accepts classified objects from the TBC 56 to make a refined subclass classification. (Straforini: col 15, lines 56-58.) The RBC2 does not perform a review of the defects themselves. Therefore, Straforini does not teach (or even suggest) "reviewing, with said second inspection machine, defects sampled from said defects detected by said first inspection machine in accordance with said determined sampling rate."

Independent claim 18 as amended further recites in part:

> ... reviewing with said second inspection machine, defects sampled from said defects detected by said first inspection machine in accordance with said determined sampling rate and classifying said reviewed defects with a second defect classifier corresponding to said second inspection machine; ...
>
> wherein the step of determining, said sampling rate is determined for each of defect classes classified by a first defect classifier corresponding to said first inspection machine." (emphasis added)

See also independent claim 21.

The Examiner asserted that RBC1 (first rule-based classifier module, element 54), TBC (element 56), and image processor 18 constituted the recited "first inspection machine," and identified RBC2 (element 58) as the recited "second inspection machine." However, Straforini describes RBC1, TBC, and RBC2 as being parts of a single classifier (element 10), and image processor 18 is clearly shown as a separate and distinct device. (Straforini: col 10, lines 43-53.)

It is settled law that an examiner is permitted a broadest reasonable interpretation of a claim. However, the examiner's interpretation of a reference is constrained by the understanding that one of ordinary skill would have as to the reference.

Here, the examiner provides an abstract definition of a "machine" and asserts in Fig. 3 that image processor 18 and two rule-based classifiers 54, 56 constitute a first machine. Respectfully, there is no basis for such an assertion. Straforini clearly identifies the image processor 18 as a component separate from classifiers 54 and 56 (which are components of classifier 10). One of ordinary skill in the art would not consider these disparate elements constitute a "machine." Straforini clearly identifies element 18 as an image processor and element 10, which contains classifiers 54, 56, as an element separate from image processor 18. With respect, the examiner's identification of image processor 18 and classifiers 54, 56 as being a machine is arbitrary and cannot be supported by any understanding that a person of ordinary skill would have of the Straforini reference.

The examiner further identified classifier 58 as being the recited "second inspection machine." However, the classifier 58 is a sub-component in a module identified by

reference numeral 10 (classifier 10). In fact, classifiers 54 and 56 are the other sub-components of classifier 10. At best, Straforini's image processor 18 would be understood to be one machine, while the classifier 10 would be understood to be a second machine.

Therefore, Straforini does not teach or suggest " a first defect classifier corresponding to said first inspection machine" and "a second defect classifier corresponding to said second inspection machine."

Independent claim 18 distinguishes over Straforini at least for the above reasons. Since independent claim 21 recites similar limitations as claim 18, claim 21 is believed to be allowable for substantially the same reason as claim 18. All other claims depend from either claims 18 or 21, and therefore incorporate all of their respective limitations. Reconsideration of the claims is earnestly requested.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,

/George B. F. Yee/

George B. F. Yee
Reg. No. 37,478

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 415-576-0300
GBFY:T3C:ejt
61309717 v1